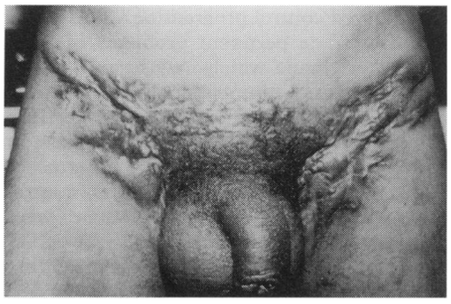

Multiple abscesses, marked inguinal scarring, and genital lymphoedema.

mal limits. The intraderman tuberculin test read 26 mm × 26 mm. Smears stained with Gram's and Ziehl-Neelsen's revealed no organisms. Culture was negative for *M tuberculosis* and *Actinomyces*. Histopathology from the inguinal area was similar to case no 1. The second biopsy from a penile site showed normal epidermis and evidence of dermal fibrosis indicating late lymphoedmatous changes. After 9 months of ATT all signs of active disease had subsided with no significant decline in the genital oedema on follow up.

CASE NO 3

A 28 year old man presented with a lesion on the buttocks for 4 years, diagnosed elsewhere on histopathology as LV. Mantoux test had read 20 mm × 20 mm and chest *x* ray was reported normal. He had been taking ATT for 3 months. Skin lesions had responded but the scrotal swelling persisted. A large atrophic area over both buttocks extending into the medial aspects of the upper thighs was seen. At places erythematous keratotic plaques were present. The inguinal lymph nodes were bilaterally enlarged, discrete, and non-tender. After 6 months of ATT the skin lesions had completely subsided with some reduction in the swelling of scrotum and penis. ATT was stopped and a year later the genitalia resumed the normal appearance.

Discussion

Approximately one sixth of patients with secondary skin tuberculosis present with anogenital lesions without lympho-occlusive complications.[2 3] Occasionally, gigantic overgrowth of the soft tissue of the lower limb following lymphatic obstruction has been seen after repeated attacks of tuberculous lymphangitis.[4]

All our patients had lymphoedema of the genitalia because the superficial horizontal group of inguinal nodes which drain lymph from the prepuce, penile skin, scrotum, vulva, and gluteal region were severely affected. In two the inguinal areas were riddled with scrofuloderma and in the third lupus vulgaris had affected the buttocks. The Mantoux test was strongly positive and *M tuberculosis* was recovered in one with scrofuloderma. Demonstration or recovery of acid fast bacilli is often unsuccessful in lupus vulgaris and scrofuloderma because the organisms are scarce[5]; hence the diagnosis rests on a strong tuberculin reaction, histopathology, and response to ATT. Lymphoedema in the patient with lupus vulgaris regressed well because the impaired lymphatic circulation was restored following ATT, but in scrofuloderma there was more destruction resulting in fibrosis and scars.

We are grateful to Dr A D Bhatt, medical director, Hindustan Ciba-Geigy Ltd, for providing the antitubercular drugs.

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Delivering retested HIV results

In April 1996 the Department of Health arranged follow up of people who had been tested for HIV using the Abbott 1Mx HIV 1/2 third generation plus assay kit after four people with high levels of antibody were found to have been given false negative results. In the UK about 30 000 people had been tested using this kit between September 1995 and March 1996.

In Portsmouth 701 patients had been tested via the genitourinary medicine (GUM) department using the Abbott kit during this period and in accordance with the Department of Health directives we attempted to ensure that all received their results following retesting of stored serum—possible in all except one case where insufficient serum remained.

The news of the possible inaccuracy of HIV tests broke over the 1996 Easter weekend and a telephone line was provided to answer patient inquiries and explain arrangements for retesting and availability of results. The Portsmouth virology laboratory completed all retesting within 10 days. A letter confirming the negative result was sent whenever possible but inevitably some patients attended the department or phoned for results before they had received their letters. Patients were asked to confirm receipt of their result by signing and returning a form in an enclosed stamped addressed envelope. Any patient attending in person or requesting a result by phone was required to provide their date of birth, clinic card, clinic number, or other identification to confirm identity and maintain the usual confidentiality of GUM departments. All 701 patients had attended to receive their original results in person usually at same day testing clinics. We audited the delivery of retested results to patients and how this was achieved (see table).

Method of delivery of retest results

Attended GUM department	48	42 contactable from recorded details
Phoned GUM department	74	59 contactable from recorded details
False details given	2	needed repeat blood sample and retesting
Letters sent	438	298 replies: 279 signed by patient
		5 unsigned
		14 not known at address
No contact requested	62	address recorded in notes
No address recorded	61	
Phone contact	16	10 results given
		1 gone abroad
		3 not known at number
		2 disconnected
Total	701	

A total of 413 out of 701 patients (59%) received confirmed negative results as recommended. The department could have contacted 390 (56%) but a further 62 (9%), although requesting no contact, had provided an address and could possibly have been reached in exceptional circumstances.

Portsmouth has a high student population and the event occurred over a bank holiday when it is possible some patients were away from their usual address. After 2 weeks local newspapers reported that all Portsmouth area retests had been negative so it is likely that some patients, knowing this, did not bother to return their forms as requested. The results for contactability are therefore almost certainly an underestimate.

Although not strictly comparable we contacted the Portsmouth cervical cytology screening unit and found that over a 5 year period 87% of 150 000 eligible women between 20 and 64 years of age responded to a written invitation for a first smear. Of those with an abnormal result < 1% were unable to be contacted.

This was an unusual exercise requiring renewed contact with a large number of patients who had attended the GUM department over the previous 8 months. The results illustrate difficulties which could be encountered in any medium or long term follow up of this predominantly young, mobile population which often attends GUM clinics for a short term anxiety or medical episode.

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Drug interactions of protease inhibitors

The interaction chart for protease inhibitors and lamivudine[1] gives an impressive visual display of a very intricate subject. I would like to pass on a few comments with regard to ritonavir.

Comparing the interactions chart with the latest theoretical kinetic data on ritonavir:

(1) Alcohol is listed as a miscellaneous reaction of clinical significance. There are no data to suggest that alcohol is contraindicated.

(2) Current information predicted largely

on known drug metabolic routes suggests that a clinically significant interaction is unlikely with the following:
aminoglycosides
amphotericin
AZT (no dose adjustment needed)
cidofavir
dapsone
foscarnet
ganciclovir
sulphonamides

(3) Clarithromycin has a large therapeutic index and no dose changes are recommended beyond the usual reduction in renal failure.

As a summary, this chart may create problems in that it excludes not only potentially hazardous agents but also those that are of use. An omission from the list could be seen to endorse or discredit the drug.

All the antivirals listed have drugs contraindicated for co-administration. A reference should be made to these on the chart or, at least, for the prescriber to refer to the summary of product characteristics for them.

Appreciating the need for brevity, a number of useful agents are not covered from groups such as antibacterial, antimycobacterial, and gastrointestinal drugs.

Drugs with significant interactions include:

(1) Anticonvulsants—levels of various anticonvulsant drugs are altered and need monitoring. These include phenytoin, carbamazepine, and phenobarbitone (levels increase and ritonavir levels decrease); lamotrigine and valproate (levels decrease).

(2) Psychotropics—levels of various psychotropics are increased and again require monitoring. These include:
chlopromazine
fluoxetine
fluvoxamine
haloperidol
maprotiline
paroxetine (avoid)
thioridazine
trazodone
most tricyclics

(3) Itraconazole, miconazole, and ketoconazole levels are increased with a reduction in ritonavir levels. A dose reduction of 50% is suggested.

The symbols used are ingenious but could be misconstrued. The meaning of the skull and crossbones is unclear and could generate unwarranted alarm. From the cluster of agents listed with astemizole it would seem to indicate a contraindication. This clearly is not the case with the oral contraceptive in which pill failure is the issue. The double exclamation marks with food indicate the 15% increase in absorption but this is a useful effect and is advised in the prescribing regimen.

It may also be prudent to indicate that where boxes are left blank this only represents the extent of current data.

Having maintained a stance of reporting all known and theoretical interactions from the earliest stage of clinical drug usage, it is easy to appreciate the complexities involved with compiling interaction charts with this drug class. However, this may actually increase the hazards of such a format. Prescribers will have a natural tendency to latch on to any comprehensible summaries in preference to more complex data or cross reference to the accompanying text.

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1 Heylen R, Miller R. Review: Adverse effects and drug interactions of medications commonly used in the treatment of adult HIV positive patients: Part 2. *Genitourin Med* 1997;73:5–11.

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Reply

We agree with Dr Simmonds that the subject of drug interactions between antiretrovirals and other drugs is an intricate and increasingly complex subject.

All the statements made in our articles[1 2] were explained in the text as well as displayed visually in the tables and were also supported by references.

The information contained in our article about ritonavir came from several sources, but mainly the 'Norvir' product information sheet for August 1996. Since our article has been published, knowledge about the drug actions and interactions of ritonavir has increased substantially. We are grateful to Dr Simmonds for highlighting some of these new data.

Our intention in creating our adverse effects and drug interaction articles[1 2] with their accompanying visual displays and text explanations of the symbols deployed was to provide the busy clinician in outpatient departments or in the ward setting with the resource to aid identification of major drug effects and interactions. Articles such as ours are not meant to supplant, rather they should complement the important role of hospital pharmacy drug information teams, product information sheets, and drug company medical information departments. We feel that any source of information about drug interactions in HIV/AIDS can only be of benefit to physicians, pharmacists, and to patients themselves.

Faced with this increasingly complex subject, we have begun to develop a computer program to aid physicians and pharmacists in safe prescribing of drugs commonly used in the treatment of adult HIV positive patients.

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MATTERS ARISING

Control of sexually transmitted diseases in Ghana: the real issues!

Sexually transmitted diseases (STDs) constitute a major public health problem in developing countries. However, most developing countries lack an effective and broad based control programme.[1] This paper discusses some pertinent problems of STD control in Ghana which may be relevant to other developing countries.

The establishment of a national AIDS control programme (NACP) in Ghana in 1986 gave prominence to the control of STDs. Although a separate STD control programme was set up, donors were generally more interested in HIV/AIDS control. It is only since September 1995 that the two programmes have been integrated with one national coordinator. However, the integration has not been completely effected in some regions of the country. STDs and HIV share common transmission routes and control strategies; hence, developing integrated control programmes makes for increased cost effectiveness, impact, and sustainability.[2] Improved treatment of STDs has been shown to reduce the incidence of HIV by 42%.[3] Specially funded annual events such as the AIDS Awareness Month campaigns while they lead to increased condom sales in the short term may not be sustainable in the long term. The collaboration between the NACP and the Ghana Social Marketing Foundation has been more helpful for the promotion of condom use.

Whereas the NACP has a surveillance system in place that includes regular HIV sentinel surveillance among pregnant women and patients attending STD clinics, the STD programme only relies on partial morbidity records from health institutions. Gonorrhoea is the only reportable STD in Ghana; other STDs in women are believed to be reported as "gynaecological disorders".

Problems associated with drug management of STDs include high prevalence of self medication, increasing resistance to antimicrobial drugs, and inconsistent treatment policy guidelines. Seventy four per cent of patients attending an STD clinic in Kumasi self medicated with at least one antibiotic.[4] Over 90% of gonococci are resistant to commonly used antibiotics—for example, penicillin, tetracycline, and co-trimoxazole; 95% or more are sensitive to newer antibiotics—norfloxacin, cefuroxime, and ceftriaxone.[5]

Earlier treatment guidelines recommended penicillin or tetracycline for male urethral discharge as these drugs were cheap, easily available, safe and, perhaps, effective. These guidelines conformed to a national policy which determined what specific drugs could be prescribed by clinicians (who were mostly medical assistants) at peripheral health facilities. Interestingly, the current treatment guidelines[6] recommend drugs (for example, ceftriaxone for male urethral discharge) which are neither included in the national essential drugs list nor recommended for use at middle level health facilities. These inconsistencies call for a revision of the national drug policies.

The lack of adequate laboratory facilities in Ghana has also led to a situation where the WHO recommended drugs[7] are essentially adopted for the national treatment guidelines although other alternatives may be cheaper, more effective, and easily available. A recent evaluation of treatment guidelines for STDs in Zambia revealed a 69·4% cure rate for male genital ulcers owing to a decreased sensitivity of *Haemophilus ducreyi* to trimethoprim-sulpha.[8] Regional or provincial hospitals in developing countries where adequate